

Brüel & Kjær

2232

Precision Sound Level Meter

Valid from serial no. 963 965

037-0402



Service



2232

Precision Sound Level Meter

Valid from serial no. 963 965

037-0402

Consisting of:

Service Instruction

Checking Procedure

Adjustment Procedure

Mechanical Parts

ZE 0424 Amplifier/Detector/Display Board

- - - - -

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3-1	9.81
1	9.81
2	9.81
3	9.81

Spare Parts

Please state type and serial number of the instrument when ordering spare parts.

Trouble Shooting

If any fault should occur please check the instrument according to the Checking Procedure.

When a fault has been traced and corrected, the voltages and adjustments influenced by the correction must be rechecked. The complete instrument should then be tested to make sure that basic functions are operative.

The tolerances given in these notes are intended for use as guide for adjustments.

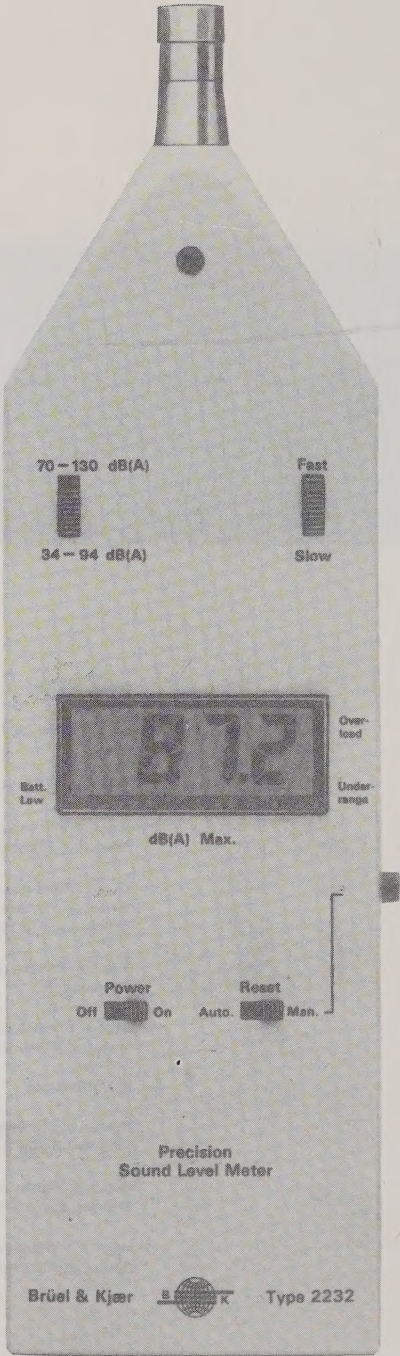
Before correcting any apparent deviation make sure that the measuring instrument has tolerances small enough not to affect the measurement.

Modifications

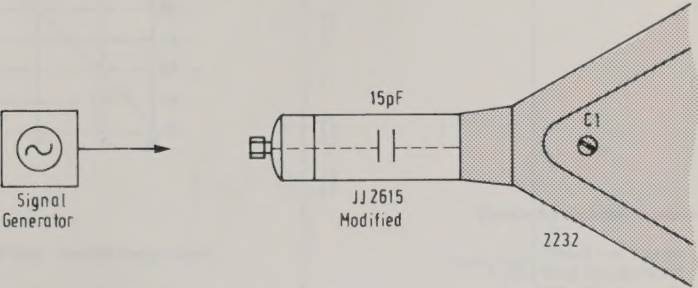
Due to the constant technical progress the instrument will be modified from time to time in order to provide continuously improved performance.

For this reason there may be small differences between the instrument and the Service Instruction.

However, the local Representative Service is in possession of all information regarding the modifications that have been made.



Please note that when the switches RESET, FAST/SLOW and Range are operated the instrument always indicates Overload ▲ for approx 1 second before new value is displayed, or instrument is reset.



Electrical input signals should be applied via a 15 pF capacitor e.g. B&K ref. CT 0505 built into a B&K adaptor JJ 2615 (or JJ 2614).

Display

Power: "On"
RESET: "Auto"
FAST/SLOW: "Fast"
Range: "70-130"

Check display for the first 2 seconds of operation:

Batt Low: BAT.
dB (A) Max: 188,8.
Overload: ▲
Underage: ▼

Amplification

Input signal: 50 mV, 1000 Hz.

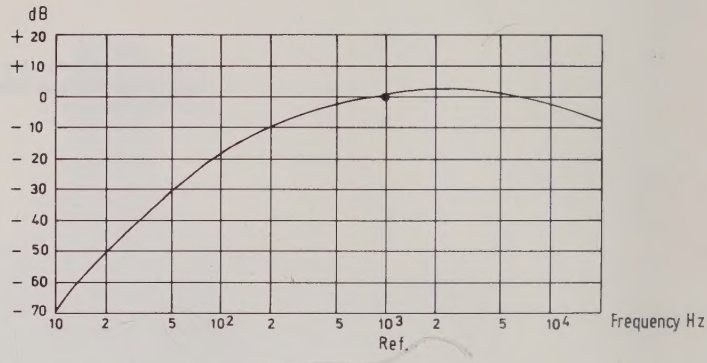
Check display: $94,0 \pm 0,3$.
If necessary adjust C 1.

Check DC OUTPUT: 1200 ± 36 mV.

Range	Input signal (1000 Hz)	Display	Tol.
"34-94"	<0,05 mV	---▼	$\pm 0,3$
	0,05 mV	34,0	
	50,0 mV	94,0	-
	>50 mV	---▲	
"70-130"	<3 mV	---▼	$\pm 0,3$
	3,15 mV	70,0	
	3,15 V	130,0	-
	> 3,15 V	---▲	

Measuring Ranges

Check according to above table in both "Man." and "Auto" position of RESET.



Frequency Responce (A-curve)

RESET to "Auto"
FAST/SLOW to "Fast"
Range to "70-130"

Input signal 500 mV, 1000 Hz.
Check A-curve according to above.

Time Constants

FAST/SLOW to "Slow"

Adjust input signal for approx 1 V on DC OUTPUT.
Interrupt input signal.
Check decay time: Approx 30 dB/s.
Check decay time: Approx 4 dB/s.

Noise

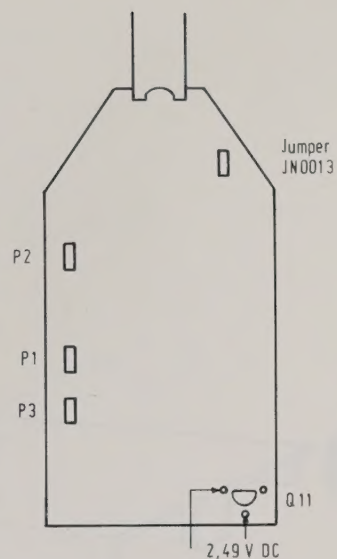
FAST/SLOW to "Fast"
Range to "34-94"

Shortcircuit input via the 15 pF capacitor.
Check voltage on DC OUTPUT: max - 400 mV.

Acoustical Calibration

Range to "70-130"

By means of Sound Level Calibrator Type 4230 and Microphone Type 4176 check display: 93.8 dB (A).
If necessary adjust C 1.



Vb Voltage

POWER: "On"
RESET: "Auto"
FAST/SLOW: "Fast"
Range: "70-130"

Check voltage on reference element Q 11: 2,49 V DC.
If necessary adjust P 2.

Detector Adjustment

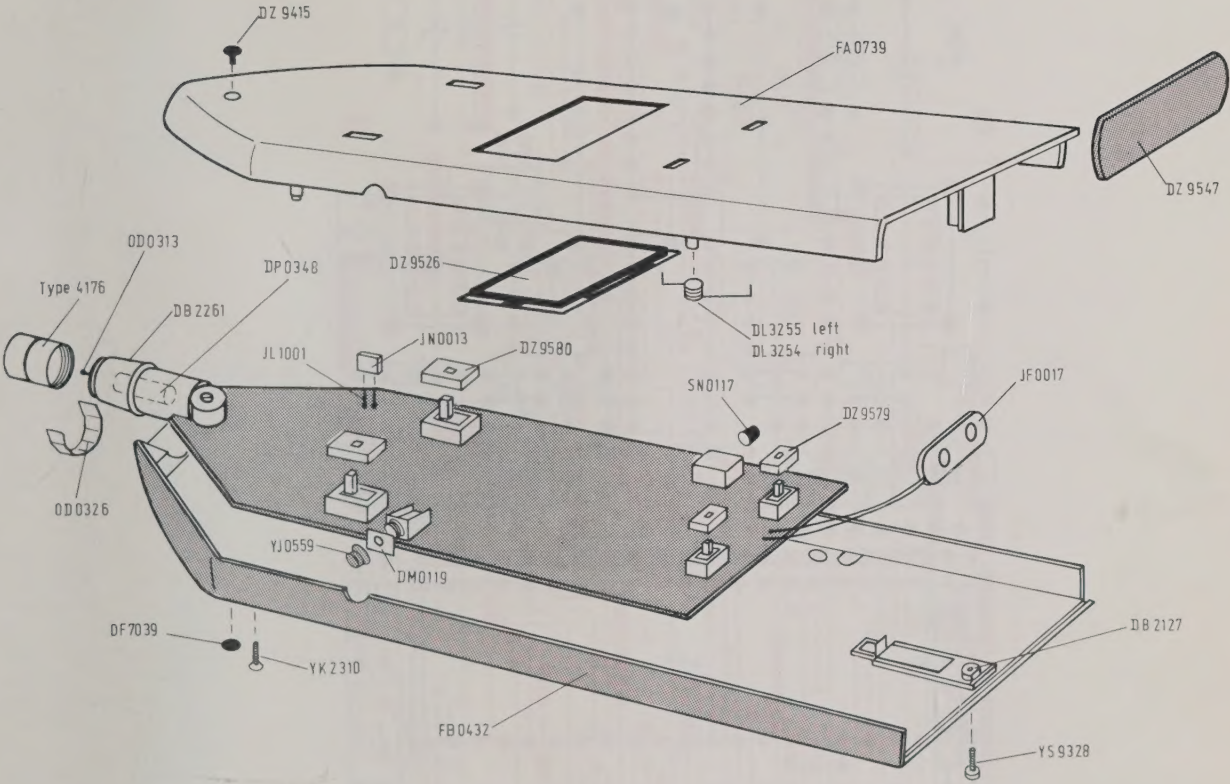
The instrument must be screened during adjustment.

Input Frequency: 1000 Hz.

Adjust input voltage for 2,37 mV on jumper JN 0013
Check display: 75.
If necessary adjust P 3.

Adjust input voltage for 422 mV on jumper JN 0013
Check display: 120.
If necessary adjust P 1.

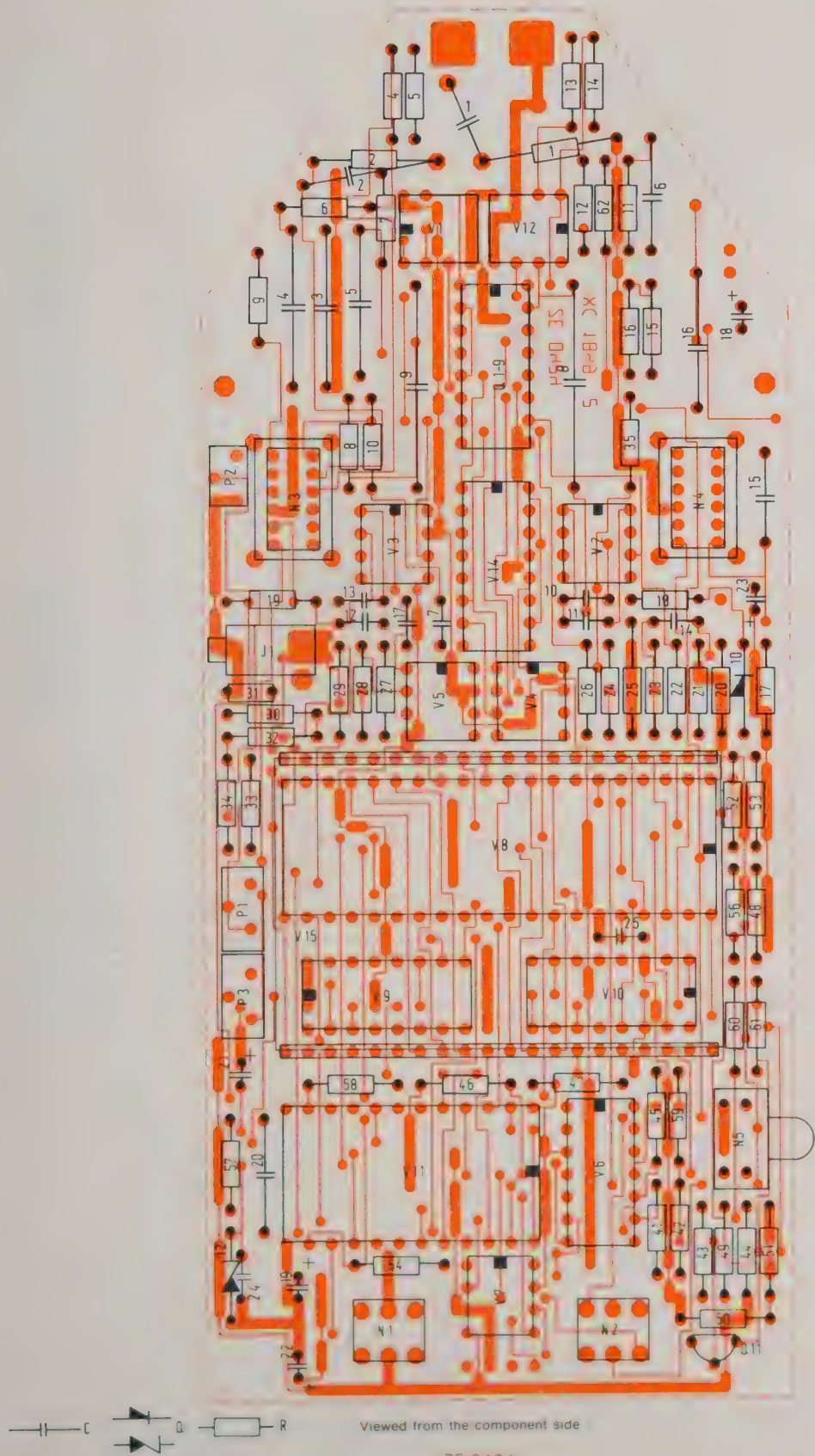
Repeat as the two adjustments influence each other.





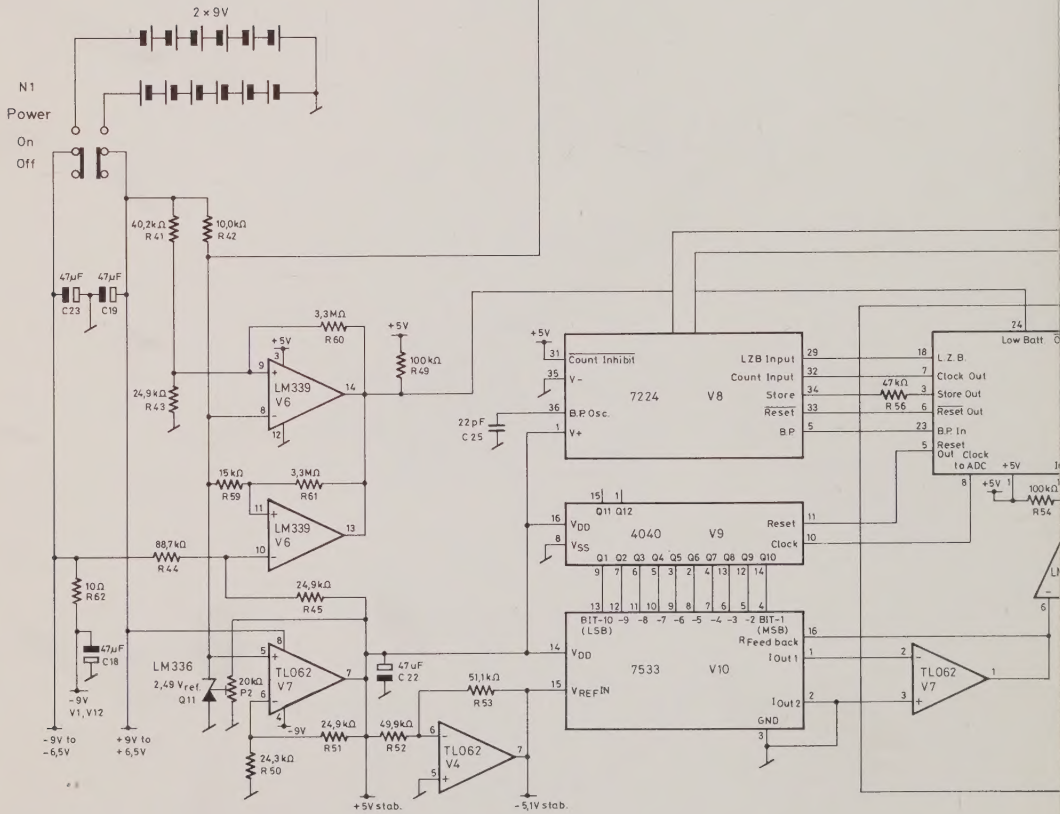
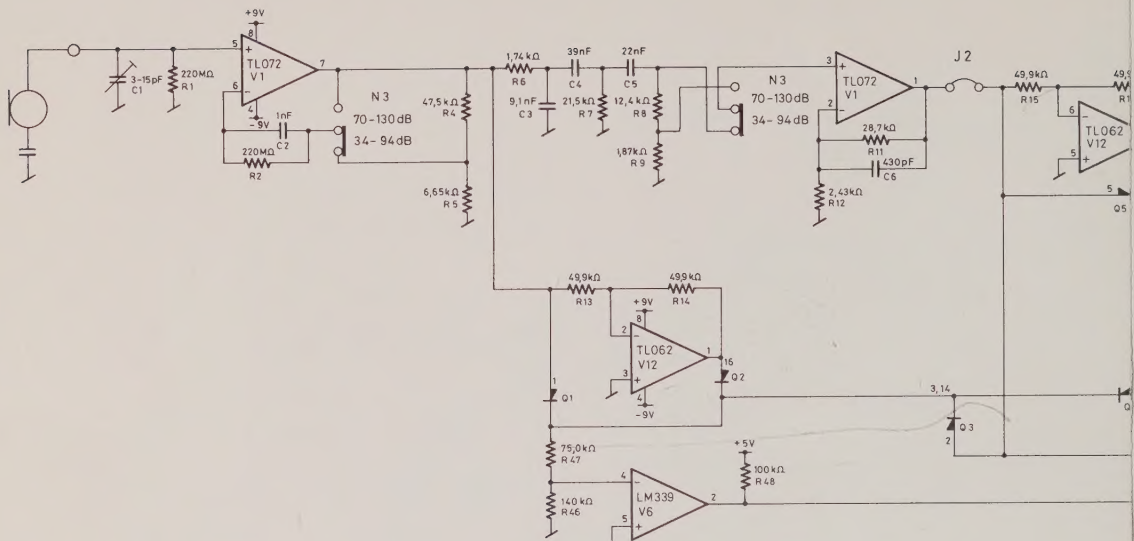
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PARTS LIST

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Brüel & Kjær Denmark DK 2850 Nærum.			Accessories / Zubehör / Accessoires / Tilbehør.		Type 2232.
1	BE 0685	Instruction Manual	Handbuch	Instructions	Brugsvejledning engelsk
1	BI 0402	Service Instruction	Service Anleitung	Instruction de service	Servicevejledning
1	BR 0256	Mini instruction multi language	Mini Handbuch multi sprache	Instruction mini langue multi	Minivejledning multispr.
1	JP 0213	Mini Jack plug	Miniatur - stecker	Fiche Mini Jack	Mini Jack stik
2	QB 0016	Batterie Alkaline	Batterie Alkaline	Pile Alkaline	Batteri Alkaline
1	UA 0459	Windscreen	Windschirm	Ecran anti-vent	Vindskærm

